

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Hugh P. Craig )  
Serial No.: (not yet assigned) )  
Filed: February 16, 1999 )  
For: PRINTABLE COMPOSITIONS, AND THEIR )  
APPLICATION TO DIELECTRIC SURFACES USED )  
IN THE MANUFACTURE OF PRINTED CIRCUIT )  
BOARDS )

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner  
for Patents  
Washington, D.C. 20231

Sir:

This Information Disclosure Statement discloses information which has come to the attention of applicants and/or their attorneys and is being submitted so as to comply with the duty of disclosure set forth in 37 C.F.R. § 1.56. In accordance with 37 C.F.R. § 1.97(b), this Statement is being filed within three (3) months of the filing date of the above-identified application or before the mailing date of a first Action on the merits.

Neither applicants nor their attorneys make any representation that any information disclosed herein may be "prior art" within the meaning of that term under 35 U.S.C. §§ 102 or 103. Moreover, pursuant to 37 C.F.R. § 1.97, the filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made or as an admission that the

information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

In accordance with 37 C.F.R. § 1.98, this Information Disclosure Statement includes and is accompanied by:

1. A completed copy of Form PTO-1449 listing the patents, publications and other information being submitted for consideration; and
2. A legible copy of each patent, publication and other item of information in written form listed on the enclosed Form PTO-1449.

#### NON-ENGLISH INFORMATION

Pursuant to 37 C.F.R. § 1.98, following is a concise explanation of the relevance (as it is presently understood by the individual designated in 37 C.F.R. § 1.56(c) most knowledgeable about the content of the information), of each listed patent, publication or other information that is not in the English language:

*WIPO Patent Application No. 96/30966:* The invention concerns a system for producing electrically conductive connecting structures comprising (A) an adhesive; and (B) an electrically conductive metal paste containing at least two metal powders of differing melting points and a small quantity of organic auxiliary agents. The metal powders are chosen to ensure that they form an intermetallic phase on heating and the organic auxiliary agents can be made largely to evaporate at the temperature applied in order to form the intermetallic phase. The invention also concerns a process for producing electrically conductive connecting structures using the system proposed, involving the following steps: (1) an adhesive is applied to a carrier; (2) the metal paste is applied to the adhesive; (3) the metal paste is heated to a temperature at which the metal powders form an intermetallic phase. Also disclosed are processes for producing circuits and printed circuits using this system. According to the invention, electrically conductive connecting structures such as circuits are obtained with excellent adhesion and good electrical conductivity and soldering qualities.

*WIPO Patent Application No. 96/13041* discloses a method for conducting ink in which first and second metal grains are inserted in an organic material to form a conducting line, the second metal grains (4) being interspersed among the first metal grains (2). The melting

temperature of the second metal grains (4) is in the range of the melting temperature of the first metal grains (2) and the hardening temperature of the organic matter.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "E. R. Witt", is written over a horizontal line.

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Date: February 16, 1999

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